Journal of the
Amateur Photographic Society
OF
Madras.

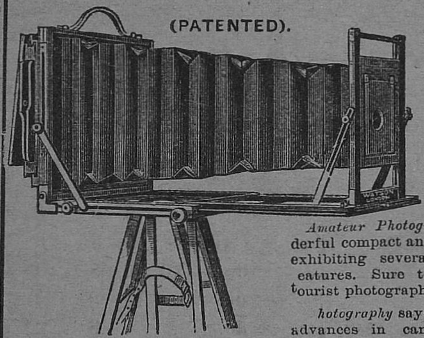
Vol. 4.—No. 3. Price As. 8.

February, 1898.

HIGHEST CLASS PHOTOGRAPHIC REQUISITES.

WATSON'S ACME TOURIST'S CAMERAS AND RECTILINEAR LENSES.

(PATENTED).



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Camera and three double slides	9 12 0	10 0 0	12 5 0	14 0 0	16 12 6	21 0 0
Rapid Rectilinear Lens with Iris diaphragm	4 0 0	4 10 0	5 0 0	6 15 0	8 15 0	11 10 0
Solid Leather Travelling Case with spring lock ...	1 15 0	1 15 0	2 2 0	2 10 0	3 0 0	3 15 0
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Brass binding extra—recommended for India.				
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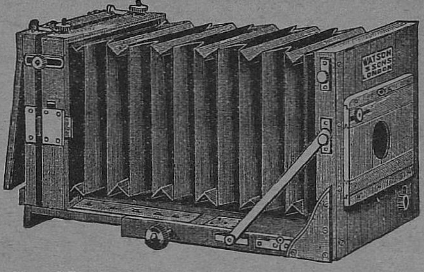

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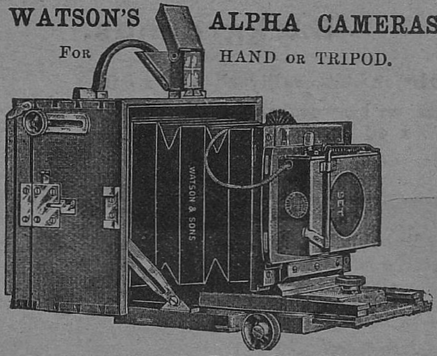

No 2 Alpha Outfit.

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Camera with double action front, double extending base, swing back, and rackwork focussing adjustment, and three double dark slides	6 10 6	7 1 6	8 5 6
Rapid Rectilinear Lens with Iris Diaphragm ...	2 17 6	3 2 6	4 0 0
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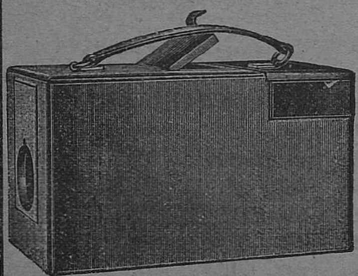

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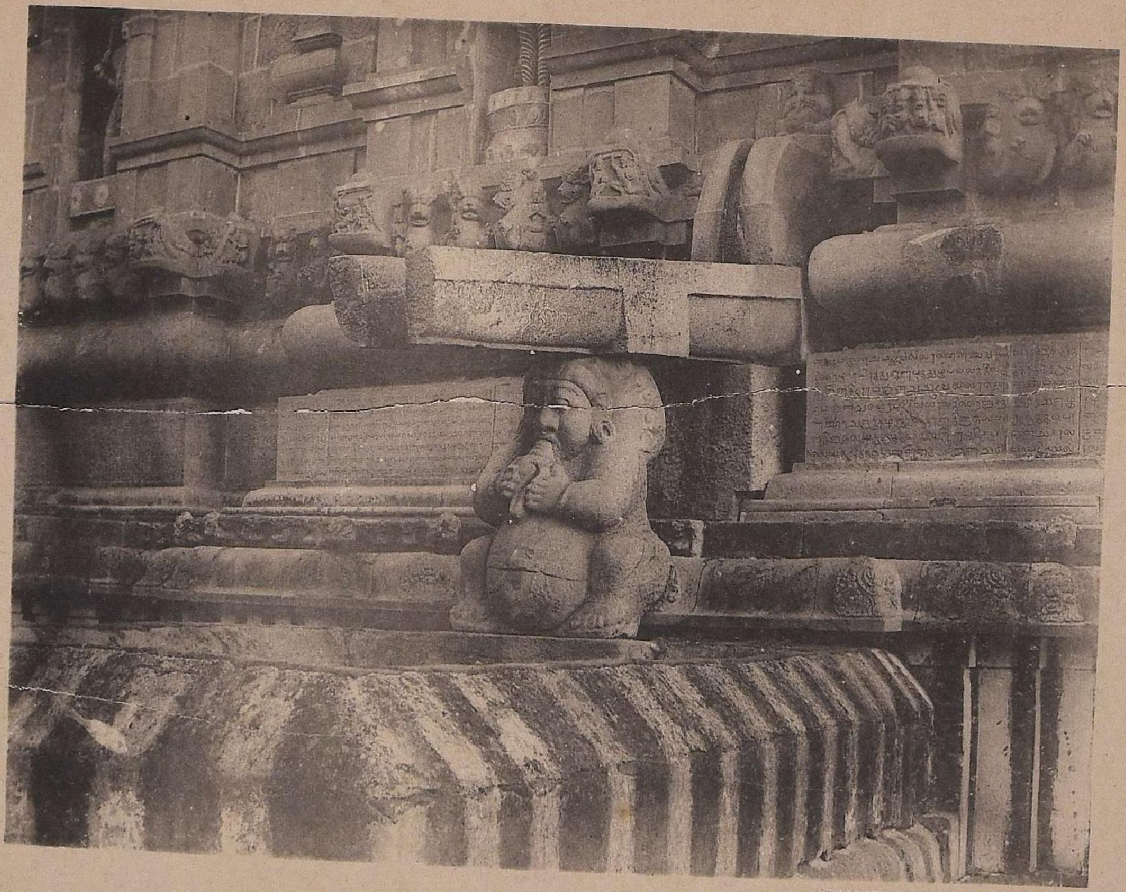
Do. do. 48 „	„ ...	2	2
Do. do. 24 half	„ ...	1	12
Do. do. 48 „	„ ...	3	4
Do. do. 24 full	„ ...	2	12
Do. do. 48 „	„ ...	5	0

Madras, Bangalore and Ootacamund.



PHOTOTYPIE S.A.D.A.G. GENÈVE

A SPOUT TANJORE TEMPLE

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Journal of the Amateur Photographic Society of Madras.

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EDITORIAL NOTES.

BACKGROUNDS are a source of great anxiety and trouble when amateurs attempt portraiture.

In a recent Journal on this subject, trees thickly covered with green leaves were advocated, which, when under exposed, give the desired black background; the best time to gain this effect is an hour before sunset; the subject must be placed 30 or 40 feet in front of the trees which are to serve as a natural background, and the figure is to be placed in such a position that will ensure the characteristic qualities of the head to be brought into prominence. Many effects of lighting can be made by moving the figure backwards or forwards a trifle.

"Experience in this direction is the best teacher. Focus on the eyes, and expose the plate without stopping down. In order to obtain the best results, your lens must be able to cover the plate at full opening. Using a very rapid ordinary plate, not orthochromatic, give only a sufficient time to fully expose the full figure or head, whichever it may be. The plate is developed with a full strength developer, and development stopped when the portrait has gained sufficient density. It is best to keep it on the thin side—most portrait negatives are much too dense. After having fixed the plate, it will be noticed that the detail in the trees is but faintly suggested. This is the natural cause of their having been badly illuminated during the exposure, and that the ordinary plate is not over-sensitive to the green of leaves. When ultimately printing from such a negative, the background will print out black, while the portrait proper assumes its proper gradations. No doctoring of negatives thus obtained, nor any dodging in printing them, is ever necessary, if the original conditions have been carefully attended to."

For the above only a very practised hand can be sure of success, this background for beginners often turning out restless and dis-

turbing, the wind playing havoc among the leaves at the most important moment. For these reasons it would be better to make one's own background according to the subject to be photographed, a fair figure to have a dark background or *vice versa*. The *Amateur Photographer* gives the following suggestions on making backgrounds:

"It is preferable to make the frames uniform in size, and of as light material as possible. A convenient size for heads and busts is 6 ft. square, while for groups, etc., 8 by 10 ft. will be large enough for ordinary work. For the larger size use wood 2 in. by 2 in., and for the smaller $1\frac{1}{2}$ in. by 1 in., the narrower face to be the edge of the frame. A convenient support for the frames can be made by taking for uprights, two pieces of wood 4 ft. long and somewhat heavier than the frames, fastening heavy pieces 14 in. long across one end of each piece for feet. Connect these feet by pieces long enough to give a width between the uprights equal to the width of the background. Bore holes in the uprights at intervals of 3 in., and also one in the middle of each side of the frames. Two wire nails or screws are used as horizontal axes for supporting the frames. The background can then be used in four different positions, since it is square. It can be swung at any angle and can also be raised or lowered in the different holes of the support.

"It is not necessary to make such a support for the larger frames, but fasten directly to the frame two feet and provide them with castors. If it is desired to use it in various positions, feet can be put on all four corners. This frame can be made portable for indoor work by sawing either the longer or shorter edges in half, and then heavy pieces screwed over the sawed places when the background is to be set up. In folding the background with canvas side inward, a round stick should be placed at the fold to prevent a crease in the canvas.

"For covering the frames use common unbleached sheeting or any kind of material of sufficiently fine texture and of the width desired. A tightly stretched surface can be obtained by tacking on the material while it is a little wet.

"The background paint is best prepared thus: cover two pounds of whiting with water; allow it to stand ten minutes and then stir until free from lumps, and has a creamy consistency. Swell three ounces of glue in sufficient water, melt, and add nearly all to the whiting. To the remainder, add one teaspoonful of lamp black, and stir until smooth. Add enough of this latter to the whiting to give a pearly grey colour *when dry*. Avoid getting the paint so thin as to run and make streaks. Stir thoroughly and apply evenly with a broad paint brush or whitewash brush. The paint always dries much lighter in colour. The proper colour can be determined by trial with the eye and then by the camera.

"This makes the plain foundation. Variations from this point onward depend upon artistic skill. Cloud effects are numerous, and exterior or interior scenes may be worked on the canvas.

"For the portrait backgrounds a plain light, a plain dark, and several cloud effects; for groups, etc., a cloud effect and an interior or exterior scene will be ample for the amateur. Since both sides of the canvas can be painted, or canvas can be put on both sides of the frame, three frames will be sufficient for six backgrounds. Since the frames are uniform any one may be used in the same support.

"The cloud effects are made upon the pearl grey foundations by means of lighter or darker paint, or both. The clouds are painted roughly the intended shape and shade. This must be done rapidly so that the dry foundation does not become wet and blend with the colour being applied. With some rather thick glue water make a broad band around the edge of the wet clouds. Then at once shade one into the other with a stippling brush or a rag-pounce made by gathering a rag around a ball of cotton or other soft material. The method of use is to beat on the background in the cloud and near the edge of same, then work all round the edge getting nearer the edge after each circuit, and gradually shading off into the foundation. Always work the lighter colour into the darker. Suggestions in regard to making clouds may be obtained from those clouds found in paintings, photographs, and the sky."

The question of shade for the background is a matter of pure choice, some artists repeat the shades of the face in their backgrounds carrying the shade in gradations according to the lighted or shaded side of the figure, this effect is most pleasing, we get tired of faces as beams of light walking out of dungeon darkness, and a face thus placed gives one the impression of troubles and darkness around; we therefore

gladly turn to the lighter school. Amateurs who cannot boast of a long abiding place (especially in India) could use a high clothes-horse, and drape it with materials of different shades, as fancy pleases, and over all spread carefully and evenly a neutral tinted muslin, which would have the effect of a painted screen without any cost, and very little trouble. Let us be careful, however, how we place those background tones; we must settle on our highest point of interest in our study, and our highest light, and gradually subdue the tones by gentle gradation until the background is absolutely negative. There must be no two high lights fighting for supremacy, no two tales to be told, but rather our eye must be led to the centre of attraction and rest there.

It is said of Rembrandt that he painted with only one light, *i.e.*, an aperture in the roof of his studio about 2 ft. square and so secured concentration.

In home portraiture many pleasing results may be obtained by simple means, for example the light from a window with either the top or bottom panes shaded with tissue paper; a sheet mounted on a clothes-horse as a reflector and brown paper or blanket background.

OUR illustration is from a negative by Mr. C. Michie-Smith and represents a Spout in a Tanjore temple; the said spout carries off the water used for bathing the god. The water becomes holy in the process, and therefore deserves to have a fine spout as the one in question to carry it into the trough placed under it.

SO many of our readers are medical men interested in the use of the Röntgen rays, we quote a letter of an officer writing from Kohat, Punjab, to the *Irish Times*:—

"Having just returned from Maidan, the heart of the Tirah, where I have been on 'special service' with the rays, in company with Surgn.-Major Beevor, A.M.S., who brought the apparatus out from England as an experiment, I thought a short account of its great value in the field might interest your readers, and awaken the authorities to the fact that, in future campaigns, two complete sets of Röntgen-ray apparatus at the least should be with the expedition, one at the very front of operations with the field hospital, and the other at the base hospital.

"It stands to reason that the sooner a bullet is detected in a limb, and extracted, the less chance there is of suppuration, and the more chance there is of the patient making a rapid and complete recovery. But it is one thing to know a bullet is in a limb, and it is quite another thing to be able to find it, and in a great number of cases the latter can only be accomplished by means of Professor Röntgen's great discovery.

"I need only quote two cases from a great number of those that passed through our hands to show what a complete success and what a great boon it has been to the wounded on this expeditionary force, and I think, as it is the first time it has ever been used on active service, both Surgeon-Major Beevor and myself might well be proud of our success, as the packing up of the apparatus, its transit over the most difficult passes into a country never before occupied by white men, was no easy matter, and entailed the greatest care and supervision to prevent the delicate mechanism of the coil and tubes being injured.

"One case was a Gurkha, who, while in a kneeling position, was shot at from above, receiving a bullet wound well above the knee. On being brought to hospital, he was examined, and the bullet searched for, but its presence baffled the most expert military surgeons. The rays were applied, and a radiograph taken, which developed out beautifully, clearly showing the bullet lying up against the small bone of the leg, at the upper margin of the calf.

"In this case it is easily seen what occurred. The bullet, owing to the position of the limb at the time of injury, travelled down behind the knee joint and into the calf, where it was discovered; and it is readily understood why all search for it in the vicinity of the wound failed to reveal its whereabouts.

"The other was a case of an officer in a Sikh regiment who received a transverse wound through the front of the chest. There was a wound of entrance and one of exit, and the bullet was supposed to have gone completely through, as no trace of it could be found. The patient complained of great pain and uneasiness near the wound of exit, and to satisfy him we applied the rays. The bullet was at once seen to be lying against the lower border of the second rib, and was immediately cut down on, and removed, and not one moment too soon, as a large abscess

had formed and was on the point of bursting into the lung, which most probably would have proved fatal; and so a valuable life was saved. In this case the bullet was, as I said before, supposed to have come out, but what occurred was this—the bullet struck the margin of a rib and divided, leaving half its bulk behind, the other half making the exit wound.

"I think these two cases alone are quite sufficient to convince the most sceptical that the presence of the X rays on active service is essential for the well-being of the soldier, but as everything connected with the medical department, both in peace and war, is done on the most economical and cutting-down scale, the chances of the military authorities adopting the latest discovery are very small unless it is brought home to them through the medium of the press, who have all along been our greatest friends, and it is with this object in view I am sending you this account of the first attempt to use the X rays on active service."

HOW I SAW THE ECLIPSE.

IT was certainly remarkably stupid of me not to have brought even a pair of binoculars into camp to celebrate properly the Eclipse of the Sun on the 22nd January. Was then this great event, which had tempted astronomers to our sultry shores from the further ends of the earth, to pass by unobserved, or with only that time-honoured but somewhat primitive apparatus, a piece of smoked glass?

On the evening of the 20th this seemed only too likely.

But then I began to cast about for any stray principles of optics that might be lying around in my mind; and, though a strict examination revealed very few, and these rather antiquated, I got them out and set them to work on the following problem:—Given, that I have in my possession a camera with a Dalmeyer's R. R. lens and a Swift's microscope, can I by some shrewd combination of them accomplish anything of the nature of a telescope?

I thought of paper telescopes, such as students are required to make in their astronomical course; and I also supplemented my mental efforts by a little practical trial and error investigation, on the good old principle that an ounce of fact is worth a ton of theory. I felt I was taking rather a mean advantage of the science of Optics, but then time was limited.

To be brief, a very simple bit of apparatus was eventually evolved; and as I am not now thinking of taking out a patent for it, I may just as well place it before your readers.

A single-fly tent was pitched with one slope of the roof facing due south. Inside the tent a pile of boxes was made, surmounted by an empty kerosine box, tilted up on one of its shorter edges, and kept in such a position that a slope of about 60° was made with the horizon. This position was rendered stable by piles of stones arranged round it and by others inside the kerosine case as ballast. Along the slope of 60° I screwed my extended camera, with the lens protruding through a hole in the roof of the tent. Thus the lens pointed south and upwards at an angle of 60° and gave, from about 11 to 1 o'clock, a minute image of the sun on the ground-glass.

Using the one inch objective from my microscope, I was now able to magnify that image, and to throw it discreetly downwards on to the floor of the tent, where it was received with all honours on a drawing board sumptuously furnished with white paper, and tilted at a complementary angle of 30° with the horizon. And there, resplendent in the darkened tent, lay an 8 inch representation of the sun, cool and pleasant to look upon! A little unnecessary detail in the structure of the ground-glass made his majesty's complexion look rather rugged, but this only served to give the picture a touch of reality.

When the day arrived there was no hitch in the proceedings—everything had been carefully arranged. The village tom-tom was engaged for the day, regardless of expense; and word went forth to the inhabitants that the eclipse was now on view in the sahib's tent. Whereupon a goodly stream of the more respectable villagers came to the show, admittance being by ticket only. In batches they were marshalled into position and saw nothing at first but the dull white of the drawing-board, when, *hi presto!* and the glorious image of the sun with a mouthful gone was thrown for their gratification (and, we will hope, edification) before their astounded gaze. Some realistic effects were produced, as clouds passing across sent a shiver as it were through the writhing body of *Surya* being devoured by the serpent *Ketu*—for this was how my demonstrator had

to describe the event. He began laudably enough by trying to explain to them the fairy tales of modern science regarding the nature of an eclipse, but this was too hard for them to believe compared with the beautiful simplicity of their serpent theory.

Things were proceeding merrily (and coppers changing hands rapidly, I believe, round the corner) when clouds at last drew a veil over the termination of the bloody tragedy. At the same time an urgent telegram necessitated the instant dismantling of my impromptu observatory, and I spent the rest of the holiday (granted in honour of the Eclipse) in a flight by bicycle in the rain, *en route* to a distant part of the Presidency.

C. S. M.

A DREARY LAY.

WHAT was it caused the sad mistake ?
Why did I rashly act ?
O vain remorse that cannot fake
A total want of tact !
And I am a lonely bachelor,
'Tis useless to repine ;
The love my hobby lost for me
Can never now be mine.

The facts are these—my hobby prized
Was portraits, as you know ;
And a studio I had devised
Out of a window bow.
And I was a love-sick bachelor
In love with an angel face,
And I begged its owner to be the first
My studio to grace.

And to avoid a scandal sad
(What else was I to do ?
My duty pointed plain) I had
To ask her mother too.
For I was a model bachelor,
And dare not ask the one
To sit for me in my window bow
Without a chaperon.

My angel's dress was creamy white—
She wore it rather low,
Her mother's it was black as night,
Long sleeves, high neck, and so.
For, though I'm a lonely bachelor,
And very very shy,
For an angel face and a taste in dress
I have an artist's eye.

I posed them in the self-same chair,
(At different times 'tis true),
And she with the angel face so fair
Gazed straight at the northern blue.
For I was a skilful amateur,
And I let the daylight play
On her pleading eyes and her parted lips
In a soul-inspiring ray.

Whilst she of the somewhat riper charms
Looked away from that ray serene,
Though the pose of body, of bust and arms
Was the same for both I ween.
For I am an artful amateur,
And I saw my way I'll own
To soften the lines by a glance of light
And shade á la Mendelssohn.

And then I exposed them each in turn
For seconds two and three,
And I thought I had not a thing to learn
Of the art Photography.
But, though I'm expert for an amateur,
I *did* miscalculate ;
For I got both pictures, sad to say,
On the same confounded plate.

And I took a print, and then foolishly
(For sure my wits did fail)
I showed it to rivals in fun, ah me !
As the 'two-headed nightingale.'
Although I'm a prudent bachelor
In matters as a rule,
I utterly lost my head that day
And played the arrant fool.

And neither the mother's riper bloom,
Nor the daughter's angel face,
Have ever again adorned my room ;
I am sunk in a dire disgrace.
And I am a lonely bachelor,
'Tis useless to repine.
The love my hobby lost for me
Can never now be mine.

C. S. M.

OUR HOME LETTER.

January 18th, 1898.

Photographic matters are at their dullest just now in England. Christmas and the festivities which follow it appear to have occupied most people for the past few weeks, and so to perpetrate a rather feeble joke, "light" matters appear to have been for a time replaced by lighter ones. The weekly journals have

never been less interesting than from about the middle of December up to the present, and as so many clubs suspend their work during the festive season, there are few events of the general importance for them to report. In consequence of this perhaps a few little controversies have received more attention than they would otherwise have done. Men continue to find a good deal to say on the respective merits of diffuse and sharp prints, and the question "is photography an art" still faintly echoes from certain quarters. But of all debatable matters the merits and de-merits of the gum-bichromate process appear to have the greatest share of attention just now. Most of the adverse criticism, however, on this process can be accounted for by the very poor work produced by novices, for this method is only to be seen to the best advantage in the hands of a limited few. One bright spot, however, has illumined the darkness of winter depression. Professor Gabriel Lippman, whose attempts to reproduce the colours of Nature by photography are perhaps the most interesting and ingenious of any that have yet been brought before the public, was recently awarded the Progress Medal of the Royal Photographic Society for 1897, and at a meeting of that organization on December 14th last the Professor lectured upon his process, showing the apparatus he employed, and also some of the results he had obtained. Briefly described his method is as follows:—The apparatus consists of an ordinary camera with a dark slide, to which a plate can be securely fixed, having a small reservoir behind for the reception of a narrow reservoir of mercury. Any nature of film may be employed, either the ordinary gelatino-bromide, or, if preferred, albumino-iodide of silver. When the plate has been exposed in the ordinary manner, the mercury is allowed to flow away into some receptacle. The plate is then treated with any developer, fixed, washed, and dried in the usual manner. While it is still wet, the colours are not visible, but as it dries they gradually appear. Since the operations are practically the same as in ordinary photography, how is it then that these colours are visible? The reason is that the image has acquired a peculiar structure, which decomposes the light by which it is illumined, and sends back to the eye of the observer elements of white light, which in the aggregate make the natural colours of the object, just in the same manner as colourless drops form a rainbow. The effect is due to interference brought about by the quicksilver acting as a mirror, and reflecting back the light-waves which impress the plate at a great velocity, so that instead of propagated waves of light, stationary waves are present, which impress their form upon the interior of the film, and bring about the colouration.

A new photographic paper has been invented in Germany (as usual). As a substitute for collodion, gelatine, egg albumen, etc., a surface of vegetable albumen is given to it. Combined with sufficient elasticity, the new material is equal to collodion in hardness and surface, and superior to ordinary albumen in withstanding injury by friction. Such a paper should be peculiarly adapted for exportation, and in all probability will undergo less deterioration in hot climates than any of the present makes of paper.

Of all the applications to which the camera can be put, perhaps the most singular and interesting is that of stalking wild birds and animals. This bloodless sport is productive of much knowledge valuable to the naturalist, as throwing light at many points upon the life history of furred and feathered creatures. The Brothers Kearton have recently published a book relating their adventures and observations as field naturalists and stalking photographers. The volume consists of more than 300 pages, and has nearly 200 illustrations of photographs by the authors. Messrs. Cassell & Co., are the publishers. The title of the book is "With Nature and a Camera." The enterprise of these enthusiastic brothers seems to have had no limit. Though they have not actually bearded the lion in his den, yet they have pursued wild birds to their nests, and animals to their haunts, photographing them with their young, and under their natural circumstances. They have even succeeded in photographing such extraordinary things as a thrush at rest in a hedgerow at night, swallows asleep on the rafters of a barn door, and an owl upon the branch of a tree by the magnesium flash light. How they travel to the remote Island of St. Kilda where many adventures befell them, how then make friends with game-keepers, bird trappers, and all sorts and conditions of men is told in the book. Those who seek for some new and exciting manner of employing their cameras would do well to become acquainted with the experiences of the Brothers Kearton. In India I should think there is a fine field for such work, a field as yet absolutely unexplored.

MATTHEW SURFACE.

PROCEEDINGS OF THE SOCIETY.

Monthly Meeting held at the Masonic Hall, Mount Road,

Friday, 4th February, 1898.

The President, Mr. C. Michie-Smith, *in the chair.*

PICTURE FOR THE MONTH.

Pictures of "Pets" were sent in by Mrs. Palk, Mrs. Elliot and Surgeon-Major-General Sibthorpe.

MISCELLANEOUS.

The negatives illustrating "Puzzled's" letter (printed in last month's Journal) were shown and the results discussed.

Mr. Dunsterville showed the new developer named "Ortol," and said he had intended to have made some remarks upon his experiences with it during the last 3 or 4 weeks, and had so advised the Secretary on Saturday last.

On Sunday last, however, he had received the British Journal of 14th January which contained a very full account of the uses of "Ortol," given by such an authority on chemical matters as Mr. C. H.

Bothamley at a meeting of the Camara Club in London, and he therefore thought that it would be better to quote from Mr. Bothamley's paper and show results.

Firstly, Ortol, unlike Amidol or Metol, will not develop by itself: with some sodic sulphite it does, but very slowly, and Mr. Bothamley showed plates that had taken 17 hours to bring out the image.

The formula given by the manufacturers for the stock solutions is as follows:—

A.—Ortol .. ... 70 grs.	**B.**—Soda Carbonate. $1\frac{3}{4}$ oz.
Metabisulphite of Potash. 35 ,,	Sodic Sulphite.. $1\frac{1}{4}$,,
Water ... 10 oz	Water... ...10 ,,

For use.

For Portraits in Studio.

Take of A.—1 part.
,, B.—1 ,,

For Landscapes.

Take of A.—1 part.
,, B.—1 ,,
Water—1 ,,

half to one grain of Bromide of Potassium to be added to each ounce of mixed developer.

This works out as follows in grains per ounce of mixed developer:—

For Portraits.		*For Landscapes.*	
Ortol	$3\frac{1}{2}$ grs.	Ortol	$2\frac{1}{3}$ grs.
Meta. Pot. ...	$1\frac{3}{4}$,,	Meta. Pot. ...	$1\frac{1}{6}$,,
Carb. Soda ...	42 ,,	Carb. Soda ...	28 ,,
Sulph. Soda ...	30 ,,	Sulph. Soda ...	20 ,,
Brom. Potash ...	1 ,,	Brom. Pot. ...	1 ,,

The image began to appear in about 20 seconds and developement was complete in about 3 minutes. Mr. Dunsterville showed a negative developed with the above landscape developer with an extra grain of bromide to each ounce—as it was known that the plate had been much overexposed.

It is said, and the statement has been verified, that the addition of the extra grain or two of bromide per ounce slows the development, but does not otherwise influence upon the result.

This is a very useful thing in developing uncertain exposures. Mr. Dunsterville said in making up the solutions for transparency development he kept 3 strengths ready; one normal as for landscapes, one with 2 extra grains of bromide per ounce, and one with 4 grains of bromide extra-development was commenced in the second one, and the plate left there to finish or transferred to one of the others as it was desirable to hasten or retard arrival at the final result. Mr. Dunsterville showed transparencies developed with varying proportions of bromide.*

For bromide paper Ortol is very satisfactory using the landscape formula: specimens were shown, of which the tones were very good, although the paper has been in the country for nearly 12 months. It may be stated, however, that the paper has been kept quite dry in a calcium tube.

* Bromide of Ammonium gives a browner tone than Bromide of Potassium.

Mr. Bothamley states that Ortol is a capital thing to use for intensifying gelatine negatives, using it in place of Ammonia after the mercury. He also says he found it very good for developing partially printed-out gelatine-chloride prints. Mr. Dunsterville promised to try this and report results at the next meeting.

Halation.

Mr. Dunsterville reported that on a short trip he had recently made to the north of India he exposed some 8 dozen plates: the majority were Edwards' backed (Anti-Halo) landscape and special rapid plates, the rest being Sandell double and triple-coated and Wratten's Instantaneous plates unbacked.

He had thoroughly tested them on difficult subjects where ordinarily halation might be expected to show itself, and he brought with him a specimen negative on each of the four kinds of plates.

THE FOUR SPECIMENS WERE—

Edwards' Anti-Halo plate—Secundra—view from inside tomb looking outwards through a tracery work stone doorway.
Sandell Double-coated—Agra—The Taj, screen inside the building.
Sandell Triple-coated—Mount Abu—ceiling in Jain Temple.
Wratten's Instantaneous unbacked—Delhi—bit of the Dewan-i-Khas with open window in front.

The results in each case are very good and there seems little to choose between them, but the Edwards' plate had the severest trial: on a few of these plates it was found that the backing (a brownish material which dissolved in the developer or first washing water) had been carelessly put on, and that consequently the partially uncovered places on the plate showed in the picture—a specimen was shown.

* * * *

Mr. Dunsterville showed the Silver Medal which had been awarded to him at the recent International Exhibition held at Glasgow. In this case the Medal is not the usual solid round disc, but an oblong plaque stereotyped from a model executed by a distinguished Scotch sculptor—the size is $3\frac{3}{4}$ by $1\frac{3}{4}$ inches.

Exhibition.

A Sub-Committee was appointed to make arrangements for the Exhibition to be held next cool weather.

The constitution of the Sub-Committee is as follows:—

H. H. The Elaya Rajah of Travancore.
Mr. F. Dunsterville.
Mr. A. L. H. Palmer.
Mr. F. J. Wilson (*Honorary Secretary*).

Next Meeting.

The next meeting will be held on March 4th, members are requested to bring anything of interest to the meeting.

The Picture Subject.

For March is "A Native Industry."

The Picture subject for April is "A Bromide Print," with full particulars as to Paper, Developer, Exposure, etc., on the back of print. At the April meeting the discussion will be on Bromide Printing. The Picture Subject for the Special Competition in May is "The Gorgeous East."

CORRESPONDENCE.

To the Editor.

I have read "Puzzled's" letter in last number of the Journal and have examined the plates sent, and it seems to me that the failures are due mainly to two causes. In most cases the plates have been hopelessly over-exposed and several of the plates have been fogged by exposure to light. Plate I. has 4 seconds exposure with F/16 stop on apparently a quick plate where ½ sec. with F/32 would probably have been too long. No. II. ($\frac{1}{15}$ sec. with F/16) has had an ample exposure, but the plate is fogged either when putting into the plate holder or during development. No. III. is both hopelessly over-exposed and hopelessly fogged. No. IV ($\frac{1}{40}$ sec. F/16) is rather ~~under-exposed~~ and the plate is fogged. It will print fairly well, but a better negative would have been produced by slower development. No. V. is of course hopelessly over-exposed. If the exposure for No. VI. was really only $\frac{1}{40}$ sec. it should have been possible to get a much better picture from it; but the fact that the image flashed up almost at once shows that a much too strong developer was used. The plate is also badly fogged. The last plate, a W. and W. Inst., was greatly over-exposed but might have been made something of with a weak developer with a good deal of bromide; but this plate, too, is so badly fogged that I would advise "Puzzled" to search very carefully for the source of the stray light which is getting at all his plates. Either the plate holders let in light, or he uses an unsafe light in filling the plate holders, or in developing.

Personally I would never by choice use a metal developer for over-exposed plates—it is quite unsuitable; but if forced to use it I would begin with only a few drops of the carbonate solution and gradually add more as required. This is the best plan with almost all developers—unless you are quite sure that your plate is properly exposed—to add the whole of the alkali at once is a rash act which leads to frequent disasters. With a pyro-soda developer properly restrained and judiciously used plates which have been over-exposed as much as a hundred-fold can be saved, but if they are treated like properly exposed plates and given a full dose of alkali at once, nothing but disappointment can result.

S.

EXTRACTS.

The Development of Instantaneous Exposures.

Although the development of instantaneous exposures is really much more simple than those made by time, says a writer in *Apollo*, many mistakes occur from not considering the conditions under which such exposures are made, and by adopting such methods as would better suit normal exposures, but even in such cases it is possible to obtain good results.

With time exposures, we are not always quite sure whether it has been too short, too long, or if it was exactly right, so we are compelled to watch very carefully the appearance of the latent picture, in order to correct any mistakes made by exposing. On the developing of the snap shot, we have to do more or less with under-exposures, and the more difficult work is to produce a negative of sufficient density. Thus the development of instantaneous pictures is in every way more simple. Provision must be made beforehand to suit this particular work, so as to enable the operator to overcome any difficulties that may arise, caused by too short an exposure, or, in other words, a soft working developer must be used, and allowed to act until the proper density is reached. On the other hand it has been recommended that a very dilute and slow-working developer should be used for short exposures, but many workers do not agree with this.

During instantaneous exposures, the shadows have a very short time to act on the sensitive film, in comparison with the lights; this leads to forcing contrasts, and consequent harshness, therefore, everything must be avoided which would tend to increase such contrasts. If plates are treated with normal developer, or with a very dilute and slow-working one, the lights will take up such a density in the comparatively long time which is necessary to give, so as to allow the shadows to work through, that in printing a hard picture with rough contrasts is the result. On this account it is better to use a strong developer, which produces half and full shadows almost at the same time as the lights, or at any rate before the latter have time to become too dense. The developer, which experience has shown to be the best for this work, is pyro-soda.

A good method is to put up two separate twenty per cent. solutions of soda, then add the pyro at the time of using. Bromide solution is seldom necessary, but a few drops of ten per cent. solution may be sometimes used with advantage in developing instantaneous pictures taken in good light. It has been found that, when the plate has had a very short exposure, a soft and fully-developed negative can be obtained by first soaking it in an alkali solution before developing.

In developing a plate of 13 X 18 cent. (7 in. X 5 in. English), the operator puts it for one or two minutes into 50cc. of soda solution. This solution is put into a measure containing 50cc. of sulphite solution, and in this is dissolved one-tenth of a gramme of pyrogallic acid; the whole is then poured over the plate. The picture shows up very quickly and equally on both sides. Should the desired density not be reached before the solution becomes brown, a fresh supply of the same quantities must be made. The above proportions are for short exposures, but for still shorter ones smaller quantities of pyro and alkali must be used.—*Photography*.

Intensification of Gelatine Negatives.

By W. T. Wilkinson.

Negatives that are too thin to yield good prints can always be intensified easily, providing one precaution be observed, *viz.*, that they are perfectly fixed, as it is the invisible silver salts left in the film that cause stains, and not on account of any slight trace of hypo that may be left in.

Thin negatives are of two sorts, *viz.*, those that have been properly exposed but not developed far enough to allow of a proper density being obtained, and those which are over-exposed and, which being developed with a normal developer, cannot be got sufficiently opaque.

When it is seen that a negative is flat and thin upon taking from the fixing bath, it should be washed for a few minutes, and then placed in a clean solution of hypo, and left there for at least ten minutes, then washed for the usual time and dried. Negatives that are to be intensified can be done while wet, but it will be found that the best results are to be obtained if the negative be allowed to dry first. For intensifying gelatine negatives there is nothing better than the mercury method, using a solution of either sulphite of a soda or carbonate of soda with which to blacken the bleached film, except in cases where an extra thin negative is dealt with, in which case a solution of iodide of potassium should be used, which acts very energetically and gives a much stronger negative.

When a negative has been stained in intensifying it is usual to say that it has not been properly washed; this is not so in the great majority of cases; the fact is that it has not been properly fixed; if a negative fixed as recommended above be rinsed back and front under the tap for five minutes it can be intensified with steam, as even should there be a little hypo left in the film and cause a scum that scum can be removed with a pad of cotton-wool, but the negative on blackening will be free from stain. On the other hand, remove the negative from the fixing-bath directly it is cleared, give it an extra washing, and use a hypo eliminator, but when it is intensified it will be stained; therefore, it is imperative to see that negatives intended for intensification are properly fixed, that being of more importance than extra washing.—*Wilson's Photographic Magazine.*

How to Keep Stock Solutions.

By C. F. Townsend, F.C.S.

So many of the solutions used in photography deteriorate under the influence of light and air that it is well to know of good methods for preserving them in their pristine condition.

As regards the action of light, it is an advantage of course to keep the solution in orange-glass bottles, but it is far safer in any case to put the bottles in the cupboard. Where a bottle is often in use and exposed to the light, the best plan is to paste thick brown paper round the bottle, which makes an excellent shield. The following are the principal solutions requiring protection: silver nitrate, ferric oxalate, potassium iodide, varnishes, all stains and dyes.

Deterioration by exposure to the air is much more difficult to guard against than by exposure to light; but the difficulty can be overcome with a very small amount of trouble. The usual practice when making up a stock solution is to put the whole of it into one, or perhaps two, large bottles with more or less dubious corks or stoppers. During working hours the bottles get warm, the contents, especially the air above the surface of the liquid, expand, and some of the air is driven out through the interstices in the cork or round the badly-fitted stopper. During the night the contents of the bottle contract as they get cold, sucking in fresh air. If the bottle contains pyrogallic acid, ferrous sulphate, or any other developer or oxidizable material, the oxygen in that air is absorbed by the solution, which deteriorates accordingly. Every day this expulsion of exhausted air and fresh influx of air containing more oxygen goes on until the solution is rendered completely useless. Even if the stopper or cork be tight—a rather unusual state of things—a fresh supply of air is admitted every time some solution is taken out of the bottle. As the level of the liquid in the bottle is lowered, the air-space increases, until, if the bottle be a large one, the solution might almost as well be standing is an open dish.

There are two ways by which this state of things can be remedied. If the family bath-room is used at uncertain intervals as a dark-room, it is inconvenient to have any arrangement that requires fixing, so that the best thing for the amateur to do in this case is to fill a number of 3 or 4 oz. corked bottles with his stock solution. When corked, some paraffin candle ends or a quarter of a pound of white paraffin wax (to be obtained at the oil shop) should be melted up in an iron ladle or a tin box, and the tops of the bottles should be dipped into it so as to completely seal the cork. It is much better to use paraffin than sealing-wax, as the former soaks into the cork and fills up all the air passages; besides this, the paraffin does not chip and can be easily removed. For many purposes, by the way, it is useful to close the air-spaces in the cork by soaking in paraffin, but such corks must never be used for liquids, such as benzine, varnishes, etc., that will dissolve the paraffin.

Stock solutions of any oxidizable material stored in the manner just described can be kept indefinitely. When one of the bottles is opened the deterioration extends only to that particular portion instead of to the whole stock, as always happens when stored in bulk in the usual way. The above method, however, is inconvenient where comparatively large quantities are used. In this case it is well to employ a large containing vessel, capable of holding, say 10 litres or 2 gallons. This vessel should be closed by a cork—preferably of India-rubber—at the top and should have a tubulure in the side, about an inch above the bottom. The latter opening should be closed by a good cork with a single glass tube passing through it, to which is attached an India-rubber tube by a brass pinch-cock or a screw clamp. Through this rubber tube the stock solution may be drawn off either into the usual measuring glass, or, better, into a fixed burette. Through the cork at the top of the vessel passes another glass tube, which is connected by means of India-rubber tubing to an oxygen-trap. Whenever any liquid is drawn out of the stock vessel, no air can get in to replace it except through the oxygen-trap. As the air reaching the large vessel contains no oxygen, it has no effect upon the liquid, which keeps in good condition for an indefinite time.

There are several forms of oxygen-trap, but the principal of all is the same. The simplest form, which can be easily made at home, consists of a small wide-mouthed bottle, holding say, four to six ounces. Two tubes pass through the cork, upright, one—the inlet tube—reaching nearly to the bottom of the bottle, the other terminating just below the cork. The bottle is half-filled with broken glass or beads, saturated with strong stock pyro-soda developing solution, containing both the pyrogallic acid and the alkali, which effectually removes the oxygen from air passing through it.

Another form of oxygen-trap consists of a tube passing through the cork of the stock container attached to a bulb and inlet tube bent so as to form what engineers call a "seal." The same form can be purchased fixed on a wooden stand, and is largely used in the analysis of gases.

Potassium cyanide deteriorates rapidly in contact with air, the carbonic acid present in the air turning out the hydrocyanic (prussic) acid from the cyanide, so that if large quantities of cyanide solution are made up they

should be cut off from the air by a trap containing a solution of caustic potash or soda, instead of pyrogallic acid and an alkali. Of course this does not apply to sulphocyanide or ferricyanide solutions, which are not affected injuriously by the air.—*The Amateur Photographer.*

Something New in Silver Printing.

By R. Ed. Liesegang.

The necessity of using gold in the finishing of printed-out chloride of silver papers has, no doubt, often been regretted by photographers on account of the greatly increased expense.

Now, I have found that even without gold beautiful tones may be obtained on gelatino-chloride of silver paper, which, of course, greatly reduces the expense. The paper is to be about half printed, and then developed with gallic acid. Following this up with the usual fixing-bath, green-black to brown tones will result. Development with gallic acid is over thirty years old; but until now a combined toning and fixing-bath has always been used after development, as formerly the tones, obtained by simply fixing, were not pleasing. So Carey Lea wrote, 1864: "What is needed in the developing process is some method which will give the print a good color in the developing-bath, which color will resist the reducing effect of the fixing-bath, so that there will be no necessity to use a toning-bath."

This want is now filled. It is necessary to use as little liquid as possible while developing. I make a stock solution—

Water ...	6 ounce :	8 minims.
Gallic Acid ...	...	...46 grains.
Acetate of Soda	...	155 „
Gum Arabic ...	...	155 „

(The added gum arabic gives better keeping quality to the developer.)

Two ounces of this solution are sufficient for four pictures of size 5 x 7 inches. The development of the half-printed pictures requires about two minutes; they are then rinsed and fixed in a 10 per cent. fixing-bath.

In place of the gallic acid very diluted aqueous solutions of pyro, paramidophenol or metol may be used without the acetate of soda. A little gum arabic or fish-glue will be beneficial the same as with the pyro developer, increasing the keeping quality of the developers.—*Wilson's Photographic Magazine.*

FRAMES.

The frame of a picture—be it photograph or otherwise—says W. J. Warren, in the *Amateur Photographer*, should be as the accompaniment to a song—harmonious, unobtrusive, yet helpful and sympathetic, and part of the whole composition. The fact that exhibits at the Royal Academy must be framed in gilt, and further, that paintings, and especially those in oil, from their brilliancy of color and solidity of surface, will allow and demand a solid and brilliant frame, has rendered this style almost a necessity. With photographs, however, it is different. Time was when an Oxford frame and huge white mount were the orthodox method. The exhibition rules have put their veto on that; later the photographer hesitated to demean himself as to how his work should be framed, but left it entirely in the hands of the maker to do his best—or worst; and it was generally the latter. Now, indeed, amateurs are running to the opposite extreme, and section of some exhibitions might be classed under "Curiosities of freak framing." But still, as is generally the case, good will arise out of such extremes, and there are few who will deny that it has already commenced to show itself.

The decision with regard to gelatino-chloride prints is generally the most difficult to come to. It is only in the most extreme cases that they will stand framing close up, and then, I venture to think, the glossy surfaced ones are best in dull gilt, with the grain of the oak wood showing through, and their surface, at the most, relieved with a simple reeding. Mattsurfaced prints may be treated in the majority of cases, if a close-up frame is decided on in the same way as carbon and platinotype.

In all cases of small pictures—both P.O.P. and platinotype—a mount is wonderfully helpful, because it does away with the necessity of screwing up the vision so as to confine it to the subject and obtain nothing of the surroundings. Besides this, the suitable use of a mount is a power in our hands in influencing the appearance of our print; if the mount be darker the high lights are emphasized, whilst, on the contrary, a light print is reduced in contrast by a white mount. Recently brown-paper mounts have become quite a rage, and there is no gainsaying that, provided the tone is well chosen, they are distinctly effective. If each piece of smooth, dead surfaced brown paper which comes into the house is annexed by the amateur, he will soon have a sufficient stock to make experiments with. They may be varied in tint by using water-color paints and a mop-brush.

We are told that plate-sunk mounts are immoral, because they are a pretence that the picture has been produced by a copper or other metal plate impressed so as to leave its marginal marks upon the paper, but personally I must confess to their attractiveness, and I shall endeavor later to suggest a dodge that will absolve us from that awful accusation!

Tasteful frames may be made by covering white wood with either Japanese paper, or silk, or other material; but except in the case of the very largest sizes the pattern on the fabric threatens to be obtrusive, and should be carefully watched. These again may be toned or quietened down by an application of paint or dye, or they may be dull silver or gilt.

Cold-toned platinotypes are especially suited by black reeded frames with a silver slip within. German gilt frames are really silver gilt with a yellow varnish over, and if we remove the latter with an application of spirit we soon have just what we want. (This is a trade secret!)

Close-up wood frames are probably the most popular to-day. Thay may be made of canary wood and stained an appropriate color, green-brown or black, or better still of American walnut. If this style is decided on, one's tame picture framemaker should be asked to obtain a few lengths of the desired pattern, and later I have included some suggestions with regard to this. Gesso-treated frames with detail in low relief have been adopted in some cases, but they are very dangerous and ticklish—dangerous because there is a risk of rivalry between picture and border; ticklish because it is nasty, sticky stuff. Later I have included a recipe for making it, and I sincerely wish the adventurous luck. May they never be bird-limed into helplessness.

PRACTICE.

First, as to those plate-sunk mounts and the possibility of escaping anathema. If the edges of the negative are masked with a strip of lantern-slide strip, or non-

actinic paper placed on the film side, and if the printing paper is cut so as to overlap these marks about one-sixteenth of an inch on each side, the result will be a narrow white line all around, which, to my mind, distinctly adds to the appearance of the print if it be mounted on a dark mount. The strip may, of course, be reduced, but the size I have suggested is the most useful. It serves all the purposes of a plate-sunk white margin, or of a cut mount, and it is simple and costless.

Then as to staining wood frames. If these are made of white wood, oak, or American walnut, the same suggestions apply. If clear green or brown is required nothing can beat Steven's water stain. The wood may be first sized, and the process should be repeated if the frame is to be subsequently varnished, but I do not suggest this course as necessary, or even advisable. Experiments should be made as to the exact tone, either on a piece of similar wood, or on the back of the frame itself. The green and the brown may be suitably blended if the former is too brilliant.

A wonderful range of tones may be obtained on light cork by rubbing in a mixture of household Brunswick-black and a little Prussian-blue oil color, the whole being let down to the required consistency with turpentine; but there must be plenty of muscular exercise in the rubbing in, and at least twenty-four hours must be given for drying. The range extends from brown, either deep or light, to an absolute black with gray variations.

Another staining medium, especially suitable to American walnut, is a mixture of drop black and oil--the tone varying in proportion to the quantity of the former added. It should be applied thickly and evenly with a rag dabber, and then well rubbed in with an old kid glove and polished off with crumpled paper. By this means a rich toned semi-dull surface will be obtained that is specially appropriate with the brown-toned platinotypes and carbons we are so much affecting nowadays.

If the frame is to be covered with Japanese paper the latter should be thickly coated with glue—nothing else will hold it—and this should be repeated again and again until it becomes tractable and will stick in the position it is bent into.

Gesso frames depend for their success more on the individual knack and taste of the producer than on any directions I can give here. The composition itself is made by dissolving glue in water and then adding whiting and boiled linseed oil in equal proportions, and adding about one-eighth of resin as the mixture boils. It is used hot and placed in position with a brush or stick. Frames by this process may be suitable in seascape subjects. The lower corners can have a suggestion of kindred subjects, and the composition of the picture itself may be materially helped; but care should be taken to avoid formality either in detail or in position.

Sometimes a few actual objects may be worked in and covered with thin gesso solution—shells, or reeds, or grasses.

In order that these frames should fulfil the purpose which I defined when I commenced this article, there must be the greatest precaution used against noisy color or detail, garishness or vulgarity, and that is why I suggest in all cases that they be subsequently toned to a uniform sombre tint. Otherwise the frame will complete with the picture—"which is absurd," as we learnt at school.—*Wilson's Photographic Magazine.*

NOTES.

BACKGROUNDS FOR LARGE HEADS.

When one wishes to photograph a large head, bouquet of flowers, or any subject requiring a plain background, the following makeshifts are often very useful:—For a light background a distempered wall is very good, providing the tint be not too deep. For a medium background a sheet of brown paper without creases answers well. For a dark background pin up the focussing cloth and use that. For focussing in the last case, a shawl, coat, or newspaper can be improvised in place of the usual article.

SUBSTITUTE FOR THE GROUND GLASS OF STAND CAMERAS.

It has several times happened to me to forget the ground-glass of my camera, as I often use it for squeegeeing P.O.P. If you go for a picnic, *e.g.*, as it happened to me the other day, and leave your ground-glass at home, it may readily be replaced by a sheet of that semi-transparent paper in which bread and butter or cake have been enveloped. This is how I managed, and with good success; the results were very satisfactory.—G. H. C.

FLOWERS.

To photograph flowers: Those with long stalks, such as poppies, look well if represented as standing up, without any vase or jar. To do this, fill a box, or boxes, with damp sand or sawdust, or the fine shavings used for packing, and make the flowers stand up in this, propping them with bits of woods or paper. Put them some little distance in front of the background. Use a small stop, and give a full exposure. Isochromatic plates are best. Take the photos in a room, not far from the window, and at right angles to it. Of course, the boxes must not appear in the photo.—M. A. C.

COINS AS WEIGHTS.

The following will be found useful when it is desired to ascertain the weight of small articles, etc., and suitable weights are not handy. The weight given is that of coins fairly worn:—

$\frac{1}{4}$ oz.	... Halfpenny and 3d. piece.
$\frac{1}{3}$ "	... One penny.
$\frac{1}{2}$ "	... Florin and 6d.
1 "	... Three pennies.

—W. E. B.

COMPETITIONS.

(Open only to Members of the Society)

SUBJECT FOR MONTHLY COMPETITIONS IN { MARCH. *A Native Industry.* APRIL.—*A Bromide Print.*

SUBJECT FOR SPECIAL COMPETITION IN MAY "*The Gorgeous East.*"

RULES.

1. *Two Special Competitions shall be held, in each year, in addition to a monthly competition.*

2. *The Committee shall select the subjects for the Special Competitions, and notice of the selected subjects shall be announced in the Society's Journal in February and in July of each year. The subject for each monthly competition shall be selected two months in advance by the members present at the monthly meeting, and shall be notified in the next issue of the Society's Journal.*

3. *Pictures, &c., competing for Prizes at the Special Competitions must reach the Secretary by the last day of January and of May, and those competing at the monthly competitions must arrive in time to be shown at the monthly meeting.*

4. *Prizes will consist of Silver and of Bronze Medals, and of Certificates of Merit.*

5. *Not more than one Silver and one Bronze Medal shall be given at each Special Competition, and one Silver and one Bronze Medal may also be given at these competitions for excellence in copying, enlarging, lantern slides, or any other special branch of photography. One Silver and one Bronze Medal shall be awarded half-yearly to the exhibitors who obtain the highest and the next highest marks respectively at the monthly competitions. The number of Certificates of Merit granted at each competition is left to the discretion of the Judges.*

6. *A member may receive only one Silver and one Bronze Medal in the special, and one Silver and one Bronze Medal in the monthly, competitions, held during the same year; but should a member who has been adjudged a medal be disqualified under this rule from receiving it, he shall be given a Special Certificate instead, marked 1st or 2nd Prize.*

7. *A Special Committee of three members shall be appointed Judges by the General Committee to carry out, subject to these Rules, all arrangements connected with the competitions.*

8. *The Special Committee shall be appointed after the Annual General Meeting in January, and shall hold office for one year, and any vacancy occurring will be filled up by the General Committee.*

9. *The Special Committee shall decide upon the merits of the pictures, &c., sent in for competition, and their decision shall be final. The system of judging the monthly exhibits shall be by awarding marks, a record of which shall be kept by the Judges, the marks being totalled and the results declared half-yearly. For this purpose, only the three highest marks awarded at each competition to each competitor shall be recorded, but not the aggregate marks gained by each for a number of exhibits.*

10. *If any member of the Special Committee is a competitor, the General Committee shall appoint a non-competing member to act as Judge at that competition instead of the competing member.*

11. *No exhibit shall compete twice, but pictures, &c., already exhibited elsewhere, may be sent in for the competitions.*

12. *Lantern slides sent in for competition shall be in sets of six, and shall be judged upon the screen.*

13. *The Special Committee shall not award any Prizes or Certificates, unless they consider the exhibits to be worthy of such distinction.*

14. *Each competing exhibit shall be the entire work of the exhibitor, and when sent in shall be accompanied by a Certificate in the annexed form:—*

> "*The (1) Arranging, (2) Exposing, (3) Developing, (4) Retouching (if any), (5) Printing and (6) Trimming and Mounting were done by me without assistance.*"
>
> ____________________
>
> *Member, A. P. Socy. of Madras.*

15. *All pictures for the Special Competitions shall be mounted, and may, at the competitor's option, be framed but not glazed. Those for the monthly competitions need not be mounted, but should be trimmed.*

16. *Each competing picture should have a name or title, which should indicate the nature of the subject.*

17. *No competitor shall be allowed to send in more than six pictures to compete for any particular Prize, but the same member may compete in all branches specified in Rule 5.*

18. *The pictures gaining 1st and 2nd Prizes at the half-yearly competitions, and the best pictures sent for the monthly competitions, shall, when practicable, be reproduced in the Society's Journal.*

19. *To give up-country members an opportunity of seeing the competing pictures at the special competitions, the pictures shall be circulated to all members of the Society, not residing in Madras, who apply to see them. As this arrangement can only be carried out by the cordial co-operation of the members themselves, they are expected to forward the pictures without delay to the next member, and to send one of the accompanying post-cards to the Secretary, so that by this means the progress of the pictures may be traced.*

List of Members whose Dark Rooms are available for use by Members of the Madras Amateur Photographic Society.

T. P. S. NAGARATNAM, 47, Malayappen Street, Black Town.
E. MAENNIG, Buckingham House, Tranquebar.
J. CHOKANNA, AMILDAR, Bowringpet, Mysore State.

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1 Table 3 ft. x 2½ ft. height 2 ft. 8 inches dealwood top.
1 Teakwood Stool 2 ft. high.
1 Strong Bamboo legs 2½ ft. high suitable for iron 1½ x 2 ft.
5 Gallon drum with brass tap, bath enamelled inside.
1 Teak Stand for above 3½ ft. high.
1 Strong hand lamp ½ inch wick, one side ruby glass one side Canary and two sides glass with Canary Fabric.

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Complete Rs. 75.

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NOTICES.

Members of the Madras Amateur Photographic Society are permitted to use this column free of charge for two insertions of each advertisement—all subsequent insertions of the same being chargeable at 2 annas a line. When an advertisement becomes liable to this charge, it will not be inserted unless a postal order or stamps to the value of the charge are previously sent, addressed to Graves, Cookson and Co., Scottish Press, Mount Road Branch, Madras. Advertisements received up to the 5th of each month will be inserted in the next issue of the Journal; those received after this date will be held over for the subsequent issue.

Subscribers, and others who are not regular dealers may make use of this column for advertisements by paying at the rate of 3 annas a line.

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N.B.—The Journal is issued on the 15th of each month, and is posted free to members of the Madras Amateur Photographic Society.

Entrance Fee, Rs. 5.—Annual Subscription *for Resident Members, Rs. 15; for Up-country Members, Rs. 12. Members joining after 30th June pay Half-year's Subscription.*

Candidates for Election—*should be proposed by one member and seconded by another; and they will be ballotted for at the following meeting.*

Ordinary Meetings—*of the Society are held on the first Friday of each month at 6 p.m. and members are at liberty to introduce visitors.*

Letters to the Editor—*should be addressed care of Messrs. Graves, Cookson & Co., Scottish Press, Mount Road Branch, Madras.*

Letters to the Honorary Secretary—*should be addressed to S. Jackson, Esq., care of Messrs. Binny & Co., Madras.*

Letters to the Honorary Treasurer and Remittances—*should be addressed V. G. Lynn, Esq., care of Messrs. Best & Co., Madras.*

Communications regarding the issue of the Journal—*should be addressed to the Publishers.*

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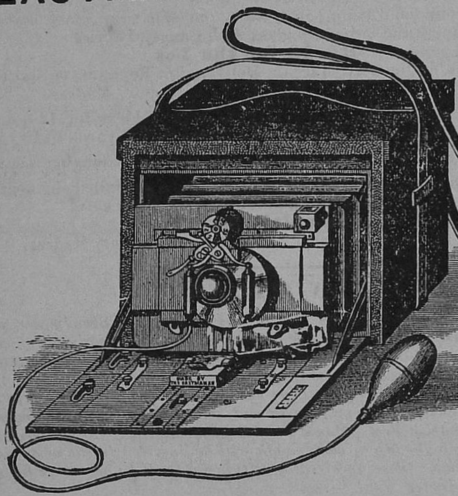

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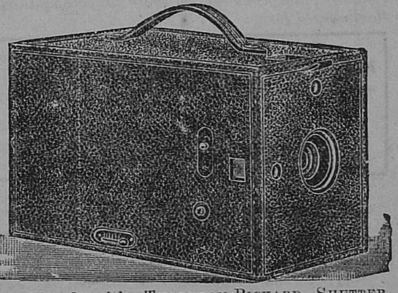

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